

BEFORE THE
Federal Communications Commission
WASHINGTON, D. C.

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COMMUNICATIONS SECTION

In the Matter of)
)
Advanced Television Systems)
and Their Impact Upon the)
Existing Television Broadcast)
Service)
)
Sixth Further Notice of Proposed)
Rule Making)

MM Docket No. 87-268

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TO: The Commission

REPLY COMMENTS OF TELEMUNDO GROUP, INC.

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SUMMARY

As a leading programmer and broadcaster of Spanish language news, information, and entertainment, Telemundo Group, Inc. ("Telemundo") files these Reply Comments both to express its support for the Comments filed by the Broadcasters, to explain to the Commission how the Comments filed in this proceeding support Telemundo's Comments, and raise other points for its consideration.

First, the Comments demonstrate that the proposed DTV allotment of channel 15 for KVEA(TV) unquestionably would cripple KVEA's ability to function in the Los Angeles DTV market by causing interference to adjacent public safety radio services and by creating co-channel interference to both KVEA's DTV and NTSC channels. In addition, the Comments prove that WKAQ-TV's proposed DTV assignment in Puerto Rico would significantly diminish that station's ability to reach island residents, and that the Commission should modify its allotment table to factor in the unique spectrum scarcity, topography, and legacy of station failures of Puerto Rico. Furthermore, the Comments show that the Commission's proposal would bring a crushing blow to LPTV and TV translator services, which contribute significantly to program diversity and media ownership. Also, UHF broadcasters should be allowed to provide additional power within their service contours.

Two other ideas proposed by other parties also warrant serious consideration. First, the Commission should allow the co-location of suburban DTV facilities on the main antenna farms of their markets. Second, the alternative DTV planning factors proposed by the Association of Federal Communications

Consulting Engineers provide a realistic approach based on sound engineering principles and demonstrate the need for adjustments by the Commission in its initial allocations proposal.

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Telemundo Group, Inc. ("Telemundo"), by its attorneys, submits its Reply Comments in the above-captioned proceeding. 1/ As a Spanish-language broadcaster and programmer, 2/ Telemundo has a vital interest in the development of a table of digital television ("DTV") allotments and assignments that does not diminish its ability to reach the Spanish-speaking audiences which depend upon its programming and consequently does not minimize the diversity of programming available to the public.

1/ Advanced Television Systems And Their Impact Upon The Existing Television Broadcast Service, Sixth Further Notice of Proposed Rule Making, FCC 96-317 (released Aug. 14, 1996) ("Sixth NPRM").

2/ Telemundo controls the licensees of seven full-power UHF stations, one full-power VHF station, and 14 low power television stations ("LPTVs"), all of which broadcast Spanish-language programming 24 hours per day. In addition, Telemundo is the parent of a Spanish-language network which distributes programming to 42 full power and LPTV affiliates in 26 markets across the country.

In order to ensure a DTV table that preserves Spanish-language programming, Telemundo actively participated in the initial comment phase of this proceeding. First, Telemundo was a signatory to the Comments filed by the "Broadcasters," a broad cross-section of television stations and networks, who, among other things, urged the Commission to reject the "core spectrum" approach and instead to use the entire VHF and UHF spectrum for the assignment of DTV channels until after completion of the transition to DTV. Second, Telemundo submitted separate Comments to emphasize the following additional points: (1) the proposed adjacency of Telemundo's Los Angeles-area DTV channel to two channels reserved for public safety communications, together with the proposed co-channel DTV/NTSC assignments in Los Angeles and San Diego, would prevent Telemundo from having competitive DTV facilities in the Los Angeles market; (2) the proposed DTV assignment for Telemundo in Puerto Rico could leave many residents of Puerto Rico without DTV service; (3) the Commission's proposals would not adequately protect LPTV and TV Translator services; and (4) the Commission should improve service to urban audiences by permitting stations to increase DTV ERP levels within their service contours.

As the Broadcasters will demonstrate in their reply comments, the volumes of comments filed by full power and low power television station operators provide overwhelming support for broadcasters' use of the entire VHF and UHF spectrum during the transition to DTV. Moreover, as shown below, numerous comments strongly support the arguments set forth in Telemundo's Comments.

I. The Comments Demonstrate That The Proposed DTV Channel Assignment for KVEA Would Have A Devastating Effect On KVEA's Ability To Compete In The Los Angeles DTV Marketplace.

The comments submitted in this proceeding confirm that the proposed assignment of DTV Channel 15 to Telemundo Station KVEA(TV), Channel 52, Corona, California, would result in interference to adjacent-channel public safety communications services. They further confirm that KVEA's NTSC and DTV signals would each likely receive interference from co-channel DTV and NTSC operations in San Diego. This combination of problems would greatly impair Telemundo's ability to compete in the Los Angeles-area DTV marketplace. The DTV table proposed by the Broadcasters in their comments would resolve these interference problems. If the Commission does not adopt the Broadcasters' proposed DTV table, it is imperative that the Commission modify its proposed allocations for the Los Angeles and San Diego areas.

A. The Proposed DTV Channel Assignment For KVEA Would Likely Result In Interference To Adjacent-Channel Public Safety Communications Services.

As Telemundo demonstrated in its initial Comments, the proposed assignment of KVEA to DTV Channel 15 would likely cause interference to the signals of the public safety radio operations on Channels 14 and 16 in the Los Angeles area. ^{3/} First, the proposed assignment is one of nine cases where the Commission's proposed DTV allotments would fail to meet the Commission's proposed adjacent-channel spacing requirement for DTV and land mobile

^{3/} See Comments of Telemundo at 4-7.

operations of 176 km (110 miles). ^{4/} KVEA's proposed DTV assignment is particularly deficient due to the potential for the use of public safety radio services anywhere in KVEA's market, creating the possibility of *zero* spacing. Second, past experience shows that the adjacency of KVEA's DTV channel to land mobile operations would inevitably result in interference that would be difficult, if not impossible, to remedy. This experience indicates that *any* complaints of interference to public safety radio services, whether actual or perceived, will likely disrupt broadcast operations in light of the potential life and death consequences of any such interference. Accordingly, KVEA must be assigned a different DTV channel. To proceed with its initial proposal would be a breach of the Commission's public interest mandate, especially where the service involved is a Spanish-language service to the largest concentration of Hispanic population in the country.

The comments filed with regard to short spacing between DTV channels and land mobile operations in certain urbanized areas strongly support Telemundo's position. The Commission's land mobile sharing proposal unleashed an overwhelmingly negative reaction from affected broadcasters, land mobile operators, manufacturers, and state government officials. ^{5/} Land mobile operators around the country complained that the Commission's decision to assign DTV channels adjacent to land mobile operations would create interference that would

^{4/} See 47 C.F.R. § 2.106, note NG66; Sixth NPRM at n.77.

^{5/} See, e.g., Comments of Chris Craft/United Group at 3-6; Comments of Silver King Communications, Inc. at 7-13; Comments of Ericsson, Inc. at 8-10; Comments of the International Association of Chiefs of Police at 3.

have a severe effect on public safety radio operations in the affected areas. 6/ They further argued that such interference could render useless their significant investments in public safety communications systems, which run into the millions of dollars. 7/

Where the Commission's DTV Table may result in interference to land mobile operations, some public safety organizations and municipalities urged the Commission to impose burdensome requirements, such as the use of filtering or other equipment, to prevent disruption. 8/ However, as the Land Mobile Communications Council ("LMCC") pointed out, the Commission's stated belief "that there are engineering solutions available to handle any adjacent channel interference concerns between land mobile and DTV" is lacking in detail and questionable on technical grounds. 9/ Chris Craft/United Group, Inc. further explained that "there are no known methods for adequate remediation of such

6/ See, e.g., Comments of Northern California Chapter of the Association of Public/Safety Officials, Inc.; Comments of Carlstadt Police Department (Carlstadt, New Jersey); Comments of the City of Mesa, Arizona.

7/ See, e.g., Comments of the New York Metropolitan Advisory Committee at 11. For example, the police chief of one municipality reported that the installation of its radio system costs \$2,000,000. Comments of the Borough of Sayreville Police Department, Sayreville, New Jersey.

8/ See, e.g., Comments of the New York Police Department, City of New York at 8; Comments of the New York Metropolitan Advisory Committee at 10; See also Comments of the Northern California Chapter of the Association of Public/Safety Officials, Inc. at 5.

9/ Comments of LMCC at 14 (quoting NPRM at ¶ 93); see also Comments of Motorola at 13.

interference at a manageable cost through filtering or similar techniques without substantially limiting the coverage of the interfering broadcast station.” 10/

Given the inevitability of interference between KVEA’s DTV channel and adjacent-channel land mobile operations, together with the extreme difficulty of resolving such interference, the Commission must assign KVEA to another competitive DTV channel. If it does not, Telemundo’s ability to compete in the Los Angeles DTV marketplace will be severely hampered and approximately 1.4 million Hispanic television households will be denied Telemundo’s DTV service.

B. KVEA’s DTV And NTSC Channels Would Experience Interference From Co-Channel Stations In San Diego

In its Comments, Telemundo explained that KVEA’s DTV channel 15 would experience unacceptable interference from NTSC channel 15 in San Diego (KPBS(TV)) and that KVEA’s NTSC channel 52 would experience unacceptable interference from DTV channel 52 in San Diego (assigned to KUSI-TV). This potential interference would result from a combination of the high elevation transmission sites of Southern California stations and the unique radio propagation characteristics along the coast of Southern California, which previously had caused the Commission to avoid co-channel NTSC assignments in Los Angeles and San Diego. 11/ The licensee of KUSI-TV, Channel 51 of San Diego, Inc., also argued that the co-channel assignment of its DTV channel and Telemundo’s NTSC channel

10/ Comments of Chris-Craft/United Group at 4.

11/ Comments of Telemundo at 9-10.

would create interference. KUSI estimated that there would be a 12.5% overlap of the KVEA NTSC and KUSI DTV contours and that, given the high elevations of the transmitters for the two stations (5,896 feet above sea level for KVEA and 2,649 feet above sea level for KUSI), terrain shielding would do little to minimize the resulting interference. ^{12/} Given the likelihood for interference in this region, the Commission must avoid NTSC/DTV co-channel assignments in Los Angeles and San Diego.

II. The Comments Further Demonstrate That The FCC's Proposed DTV Allotment for WKAQ-TV Would Result In A Loss Of Broadcast Service To Many Residents of Puerto Rico.

In its Comments, Telemundo also explained that the proposed Channel 56 DTV allotment for Telemundo station WKAQ-TV, Channel 2, San Juan, Puerto Rico, would be harmful to the public interest because it would require an impractically-high power level in order to replicate WKAQ's existing NTSC service. The other comments submitted in this proceeding confirmed the extreme difficulties that would be experienced by a low VHF station in a mountainous region attempting to use a high UHF DTV channel. Thus, large audiences on the perimeter of WKAQ's NTSC service area would be deprived of WKAQ's DTV service.

Not only would large audiences in Puerto Rico be deprived of WKAQ's DTV signal, but they would also be deprived of DTV service from other stations which, given the unique history of station failures in Puerto Rico, would not be in a

^{12/} See Comments of Channel 51 of San Diego, Inc. at 2.

position to offer DTV service at all. In order to avoid a severe dearth of DTV service in Puerto Rico, the Commission must recognize the uniqueness of Puerto Rico's crowded spectrum, difficult terrain, and history of station failures and modify its proposed DTV Table for Puerto Rico to take these factors into account. Puerto Rico's unique circumstances require a unique approach, for Puerto Rico *only*, which includes the implementation of channel preferences for stations with the longest record of service to the public and channel sharing arrangements.

A. WKAQ's Proposed DTV Assignment Would Force It To Operate Well Below Its Authorized Power Level.

As explained in Telemundo's Comments, it is difficult to replicate a low VHF signal using a high UHF DTV channel. This problem is compounded by the difficult and possibly unique mountainous terrain of Puerto Rico, where signals in the upper UHF band travel poorly. In order to replicate WKAQ's low VHF NTSC signal at this high UHF channel, the Commission assigned WKAQ an extremely high power level, 1,778.3 kW average. However, it would be entirely impractical for WKAQ to construct the facilities needed to achieve this high power level. First, it would require a higher peak power level than is currently permitted for UHF NTSC stations. Second, it would require *three times* more high-power IOT amplifier tubes than are typically used by UHF television stations today. The difficulty and expense of constructing such high-power facilities would effectively force WKAQ to construct DTV facilities that operate below the station's authorized power level. As

a result, large audiences near the perimeter of WKAQ's NTSC service area would be deprived of WKAQ's DTV signal. 13/

Although not specific to Puerto Rico, a number of comments confirmed that a low VHF NTSC station will encounter serious difficulties in replicating its NTSC coverage area if it is assigned to a UHF DTV channel. 14/ The engineering consulting firm du Treil, Lundin & Rackley explained that the average low VHF television station moving to a UHF DTV channel would need to increase its ERP significantly in order to replicate its present coverage area. The DTV peak power rating of the average station would be at least 20 times the station's current transmitter power rating. 15/ Citadel Communications Co., Ltd. explained that it would need to increase transmitter power by 30 times in order to replicate its current NTSC low VHF signal at its UHF DTV channel assignment. It estimated that a transmitter of this size, *which does not currently exist*, would cost approximately \$4 million. It further estimated that the costs of operating such a transmitter would be 12 times higher than the costs of operating the station's current NTSC transmitter. 16/

13/ See Comments of Telemundo at 11-13.

14/ See Comments of du Treil, Lundin & Rackley, Inc. at 2-4; Comments of Association of Federal Communications Consulting Engineers at 5-6; Comments of Citadel Communications Co., Ltd. at 2-3.

15/ Comments of du Treil, Lundin & Rackley, Inc. at 3.

16/ Comments of Citadel Communications Co., Ltd. at 3.

While these comments show that all low VHF stations would have difficulty replicating their signals on a UHF DTV channel, the problem is much worse for WKAQ given the difficult mountainous terrain present in Puerto Rico, where signals travel poorly in the upper UHF band. ^{17/} As California Oregon Broadcasting, Inc. explained in its comments, it is even more difficult to replicate a low VHF NTSC signal on a high UHF channel when the station is located in a mountainous and heavily vegetated area. Noting that “[i]t is well documented that signal losses in rough terrain areas . . . (where there are significant mountains and valleys) are substantial for operations in the UHF band,” California Oregon Broadcasting, Inc. argued that in such mountainous terrain, comparable service can only be obtained with a DTV channel assignment in the same band as a station’s NTSC channel assignment. ^{18/} Thus, the inability of WKAQ to replicate its low VHF signal at a high UHF DTV channel, which is compounded by the mountainous terrain in Puerto Rico, would prevent WKAQ from providing DTV service to a large portion of its current audience.

B. Given The History Of Station Failures In Puerto Rico, Many Residents Likely Will Not Receive Any Meaningful DTV Service.

As discussed in Telemundo’s comments, many viewers near the edges of WKAQ’s NTSC service area who would not be able to receive WKAQ’s DTV signal because of WKAQ’s high DTV channel assignment also might not receive DTV

^{17/} See, e.g., Hector Nicolau, 5 FCC Rcd. 6370 (1990).

^{18/} Comments of California Oregon Broadcasting, Inc. at 4.

service from other broadcasters. Puerto Rico has a long history of television station failures that suggests that many television stations in Puerto Rico with DTV channel assignments that might allow them to reach the outer edges of their NTSC service areas will lack the substantial resources required to construct and operate DTV facilities. Thus, the Commission's proposed DTV Table for Puerto Rico could leave many residents without any meaningful television service. 19/

Despite the substantial impact of the Commission's proposals on many stations in Puerto Rico, 20/ only one other broadcaster submitted comments in this proceeding. 21/ This lack of participation in this proceeding by Puerto Rico television stations further suggests that few television stations in Puerto Rico are making any plans for the transition to DTV.

C. The Unique Circumstances In Puerto Rico Warrant A Unique Solution.

Telemundo recognizes that its detrimental DTV assignment was a partial result of the severe spectrum scarcity unique to Puerto Rico. 22/

19/ Comments of Telemundo at 13-15.

20/ The Commission's DTV Table included 32 DTV channel assignments for 34 eligible broadcasters. It also included more channel assignments above Channel 51 than in any other market. Id. at 15.

21/ See Letter of WUJA-TV, Channel 8, Caguas, Puerto Rico, at 1 (complaining that its DTV assignment would result in only a 71.6% replication of the station's NTSC signal and would affect approximately 200,000 potential viewers).

22/ Puerto Rico was the only market in which the Commission could not give DTV channel assignments to all eligible broadcasters. There are only 32 open channels available for 34 eligible broadcasters. The resulting DTV table of allotments includes more DTV channel assignments above Channel 51 than in any other market. Comments of Telemundo at 15.

Accordingly, in its Comments, Telemundo urged the Commission to adopt an approach to DTV channel assignments for Puerto Rico *only* that takes into account the unique combination of circumstances in Puerto Rico, including acute scarcity of spectrum, mountainous terrain and repeated station failures.

First, Telemundo urged the Commission to reject the core spectrum approach in Puerto Rico. Given the severe scarcity of spectrum in Puerto Rico, it is even more difficult than in other markets to ascertain the amount of spectrum that will be needed for digital operations. Second, it urged the Commission to establish DTV channel preferences based on the Puerto Rico station's length of service to the public. If the stations with the longest records of service do not pursue construction on their chosen channels within a specified period of time, then the Commission should give other stations the opportunity to request these channels. Alternatively, the Commission could assign DTV channels in Puerto Rico on a "first come, first served" basis. Third, the Commission should permit channel sharing arrangements where feasible using directional antenna patterns and terrain shielding. 23/

Telemundo's proposed approach remains the best solution for the transition to DTV in Puerto Rico. If the Commission does not adopt such an approach, many viewers in Puerto Rico are likely to lose much of their free television service when stations are required to convert to DTV. The resulting reduction in the diversity of programming available to the public would be disastrous for the public interest.

23/ Comments of Telemundo at 15-17.

III. The Comments Demonstrate The Importance Of Preserving LPTV and TV Translator Services In Order To Maintain The Diversity of Programming Available To The Public And The Diversity Of Media Ownership.

In its Comments, Telemundo urged the Commission to protect LPTV and TV Translator services (referred to collectively hereafter as LPTV services) in the transition to DTV by (1) rejecting its proposed core spectrum approach, and (2) adopting certain engineering measures that would mitigate interference to and from LPTV services and make it easier for displaced LPTV operations to relocate. 24/ The multitude of comments filed by LPTV operators attest to the importance of LPTV services and the need to preserve these services during and after the transition to DTV.

A. LPTV And TV Translator Stations Provide Essential Services To The Public That Could Be Dramatically Reduced By The Commission's Proposals.

The many LPTV station owners and audiences participating in this proceeding provide eloquent testimony to the importance of the LPTV medium. Without LPTVs and TV Translators, many rural residents of this country would have no access to free televised news, information and entertainment. 25/ Moreover, LPTV stations are often the only sources of minority-oriented or foreign-

24/ Comments of Telemundo at 18-22.

25/ See, e.g., Comments of the Community Broadcasters Association at 1; Comments of National Translator Association at 1-2; Comments of Non-Commercial Television Stations, KUED and KULC at 4; Comments of Citizens TV, Inc. at 1; Comments of Humboldt County, Nevada at 1-4.

language programming available to urban viewers. 26/ Not only do LPTVs add to the diversity of programming available to the public, but they are frequently a point of entry into the broadcasting business for minorities. The Community Broadcasters Association reports that the LPTV service has a higher percentage of minority owners than any other broadcast service. 27/

And yet, despite the importance of the LPTV service to the diversity of programming available to the public and the diversity of media ownership, the Commission has proposed a DTV Table which threatens to strike through the heart of the LPTV industry. The Commission estimated that its proposed DTV Table would displace approximately 35%-45% of existing LPTV stations and 10%-20% of existing TV translator stations. Additional stations would be displaced by the proposed recovery of Channels 60-69. 28/ Some in the LPTV industry believe that these numbers could be even higher. 29/ As many commenters have demonstrated, the costs of relocating LPTV and TV Translator stations to another channel are enormous and potentially prohibitive, particularly to those operators who already

26/ See, e.g., Comments of Airwaves, Inc. at 1; Comments of Weigel Broadcasting Co. at 3-5; Comments of KM Communications, Inc. at 8; Comments of Yoneide Dinzey at 2 n.1.; Comments of Raoul Lowery Contreras at 1-2; Comments of Univision Communications, Inc. at 6-7.

27/ Comments of the Community Broadcasters Association at 1.

28/ Sixth NPRM at ¶ 66.

29/ See Comments of Non-Commercial Television Stations, KUED and KULC at 1-2 (explaining that the loss to TV Translators could be 3 or 4 times higher because of the "domino effect" on translators which also relay broadcast signals).

have invested their life savings in a station. 30/ Even worse, there may be nowhere in the core spectrum for these displaced LPTV stations to move, particularly in metropolitan areas, where many LPTV stations provide minority-oriented and foreign-language programming. 31/

B. To Preserve LPTV Services, The Commission Should Reject The Core Spectrum Approach And Implement Changes To Its LPTV Interference Standards.

As noted in Telemundo's Comments, one of the best means of preserving the LPTV service is to reject the core spectrum approach and postpone the recovery of any VHF or UHF spectrum until after the transition to DTV is complete, when the Commission can better assess the amount of spectrum needed for DTV and LPTV operations. 32/ This position was uniformly supported by the LPTV operators and industry associations participating in this proceeding. 33/ The Broadcasters pointed out in their comments that adoption of their proposed DTV table of allotments, which uses the entire VHF and UHF spectrum, would result in the displacement of 63% fewer translator and LPTV stations than the FCC's

30/ See, e.g., Comments of Citizens TV, Inc. at 1; Comments of Kaleidoscope Affiliates, L.L.C. at 1; Comments of Engle Broadcasting at 1, 5; Comments of the Community Broadcasters Association at 17.

31/ See Comments of Univision Communications, Inc. at 8.

32/ Comments of Telemundo at 19-20.

33/ See, e.g., Comments of the Community Broadcasters Association at 10; Comments of the National Translator Association at 3-4; Comments of Paging Systems, Inc. at 2; Comments of GEP, Inc. at 2; Comments of KY New Era, Inc. at 6; Comments of TV-67, Inc. at 1.

proposed DTV table. 34/ The Broadcasters' proposed DTV table also would create more room for the relocation of the smaller group of LPTV stations that are still displaced by DTV channels.

Many LPTV operators and industry groups also supported the various engineering measures suggested by Telemundo in order to mitigate interference to and from LPTV services, which included: (1) permitting LPTV stations to co-locate their facilities with DTV or NTSC facilities; (2) allowing such co-located LPTV stations to increase power levels; (3) adjusting the interference standards for LPTVs to take into account terrain and other engineering factors; and (4) permitting displaced LPTV stations to seek replacement channels without being subject to competing applications or filing windows. 35/

The Community Broadcasters Association confirmed that the co-location of LPTV stations with DTV or NTSC facilities would be an efficient use of spectrum. 36/ Several full-power television station owners also encouraged the FCC to permit co-location of facilities (albeit full-power facilities). 37/ Not only would the co-location of displaced LPTV stations with DTV or NTSC facilities

34/ Comments of the Broadcasters at 34.

35/ Comments of Telemundo at 20-22.

36/ Comments of the Community Broadcasters Association, Technical Statement at 7. See also Comments of the National Translator Association at 2-3; Comments of Signal Sciences at 2 (supporting increases in power levels for LPTV stations).

37/ See Comments of Pulitzer Broadcasting Company at 5-6; Comments of Malrite Communications Group, Inc., Engineering Statement at 7.

facilitate the maintenance of necessary interference ratios, 38/ but common antenna sites also would minimize zoning disputes, facilitate the commencement of service and minimize entry costs. 39/ Like Telemundo, the Community Broadcasters Association argued that co-located LPTV stations should then be able to increase transmitter output power levels, while continuing to protect against interference, so as to survive co-location with adjacent full-power television stations. 40/

Numerous commenters also urged the Commission to adjust its interference standards for LPTV stations. Telemundo agrees with the Community Broadcasters Association, and many others, that the Commission should relax UHF taboos, implement advanced techniques for avoiding interference or demonstrating a lack of interference, and permit the use of directional antennas and terrain shielding techniques to reduce interference between stations. 41/

Furthermore, many commenters agreed with Telemundo that the Commission should make it as simple as possible for displaced LPTVs to relocate. Specifically, these parties supported the Commission's proposals to permit displaced

38/ See Comments of Telemundo at 21.

39/ See Comments of Pulitzer Broadcasting Company at 6 n.10.

40/ Comments of the Community Broadcasters Association, Technical Statement at 7. See also Comments of the National Translator Association at 6; Comments of Signal Sciences at 1-2; Comments of WZBN TV-25, Inc. at 9 (supporting increases in power levels for LPTV stations).

41/ See Comments of the Community Broadcasters Association at 13; Comments of Yoneide Dinzey at 5; Comments of TV-67, Inc. at 2; Comments of Telemundo at 21.

LPTV stations to file applications for a new channel without being subject to competing applications or filing windows. 42/ All of these measures will help to preserve LPTV service to a certain extent. However, for these measures to have a significant impact, the Commission must not prematurely constrict the spectrum available for LPTV operations.

IV. The Commission Should Permit UHF Broadcasters To Increase DTV ERP Levels Within Their Service Contours.

In its initial Comments, Telemundo also urged the Commission to permit UHF broadcasters to calculate maximum ERP levels at their stations' coverage contour edges so that UHF broadcasters operating from mountain transmitter sites located near urban population centers, such as Los Angeles, can provide stronger DTV signals within their service areas. Specifically, Telemundo argued that a UHF station should be able to calculate its ERP at the depression angle to the station's DTV coverage contour. 43/ A UHF station should be able to use beam tilt to improve coverage inside its service area, even if it results in higher effective radiated power than that listed on the Commission's proposed DTV Table. Thus, UHF stations operating from mountain transmitter sites could improve their signals to urban viewers without exceeding their permitted service areas. 44/

42/ See, e.g., Comments of the Community Broadcasters Association at 14; Comments of the National Translator Association at 4-5; Comments of KM Communications, Inc. at 8-9; Comments of Yoneide Dinzey at 5; Comments of Engle Broadcasting at 10.

43/ A station using a directional antenna should be able to calculate its ERP at the radial to the most distant point on the DTV coverage contour.

44/ Comments of Telemundo at 22-23.

Telemundo recognizes that the benefits of using this method of determining the maximum permissible effective radiated power would be limited to those stations whose transmitting facilities are located 1,000 meters or more above the communities they serve. However, Telemundo asserts that all stations should be given the flexibility to optimize their antenna systems, including the vertical radiation pattern, to best serve their audience. While the vertical antenna pattern shown in Appendix E1, Appendix C of the Broadcasters comments may be appropriate for many stations, it is not the optimum solution for all. This is illustrated by the high optimized vertical antenna patterns specified in several recent modification applications filed by Telemundo. 45/

V. The Commission Should Permit Suburban Stations To Co-Locate Their DTV Facilities On The Main Antenna Farms Of Their Respective Markets.

Just as Telemundo supports the co-location of LPTV facilities with DTV or NTSC facilities, 46/ it also agrees with the comments of Pulitzer Broadcasting Company and Malrite Communications Group, Inc. that the FCC should allow full-power television stations to seek common antenna sites with other full-power television stations, provided the common antenna site covers the community of license and avoids objectionable interference. 47/ In particular,

45/ See, e.g., FCC Files Nos. BPCT-960711LC and PBCT-950808KE.

46/ See Comments of Telemundo at 20-21, supra Section III.B.

47/ See Comments of Pulitzer Broadcasting Company at 6 n.10; Comments of Malrite Communications Group, Inc., Engineering Statement at 7-8.

Telemundo believes that the Commission should permit suburban stations to opt for co-location of their DTV facilities on the main antenna farms of their respective markets. Not only will this co-location minimize zoning disputes and entry costs and facilitate the more rapid commencement of DTV service to the public, but it also will reduce interference among stations and improve the opportunities for accommodating displaced LPTV stations.

At present, when outdoor antennas are used, most viewers receive at least a degraded analog signal from non-colocated stations and can take steps to re-aim their antenna. But the all-or-nothing nature of DTV will make it even more difficult for stations not located in the main antenna farm to attract viewers. With DTV, viewers using outdoor antennas not aimed at the TV station's transmitting antenna may not even know the station is there. Since the FCC's Table of Allotments is based on the use of directional outdoor antennas, transmitter site location becomes a critical issue. This is especially important for the several situations where stations provide a critical foreign language service from "suburban" locations. These situations include the Dallas market (both KFWD from Ft. Worth and KUVN from Garland), the Houston market (KTMD from Galveston), and KSCI (Japanese, Korean and other languages) in the Los Angeles market.

VI. The Commission Should Adopt the DTV Planning Factors Submitted by the Association of Federal Communications Consulting Engineers.

In addition to the suggestions advocated above, Telemundo further urges the Commission to consider the alternative planning factors for DTV